



Procedure for Cleaning the Centrifuge

Purpose

The purpose of cleaning a biological centrifuge is to maintain a sterile and contamination-free environment essential for the integrity of samples during separation processes. Contamination in a centrifuge can compromise experimental results, damage samples, and lead to equipment malfunction or safety hazards.

Responsibilities

Laboratory Manager / PI: Initiates and oversees the mothballing process

Laboratory Staff: Assists in cleaning and documentation

EHS Biosafety: Verifies compliance with biosafety protocols

Scope

This scope covers the thorough cleaning and decontamination of a laboratory centrifuge to ensure a contamination-free and safe environment for future use. Activities include the removal of rotors and detachable components, cleaning of interior surfaces and parts with appropriate disinfectants, inspection for signs of contamination, wear, or damage, and proper reassembly. The procedure adheres to biosafety practices outlined in the BMBL, as well as manufacturer guidelines, to ensure compliance with laboratory hygiene and safety standards.

Procedures

- 1. Unplug the centrifuge and put on Personal Protective Equipment.**
 - a. Lab coats and gloves are required
- 2. Remove interior Components.**
 - a. Take out the rotor and any accessories like buckets and inserts from the centrifuge chamber.
- 3. Clean the Rotor Chamber.**
 - a. Wipe down the interior of the centrifuge chamber with a soft cloth and a mild, neutral cleaning agent, like soap and water
- 4. Clean the Rotor and Accessories.**
 - a. Wash the rotor, buckets, and inserts using a soft, non-metallic brush and neutral detergent.
- 5. Disinfect chamber, rotor, and accessories.**
 - a. Disinfect the rotor and accessories with either a 10% bleach solution or a quaternary ammonia followed with 70% ethanol.
- 6. Rinse and Dry.**
 - a. Rinse all components with distilled water and let them dry completely upside down to prevent moisture buildup.
- 7. Inspect for Damage.**
 - a. Check the rotor, buckets, and seals for cracks, corrosion, or any signs of damage.
- 8. Lubricate.**
 - a. Apply a small amount of centrifuge lubricant to the bucket grooves, pivots, and rubber seals.
- 9. Reassembly and Store.**

- a. **Once dry and clean, reassemble the centrifuge. For best practice, store the rotor upside down with lids removed to prevent condensation, and leave the centrifuge lid open overnight to let it air out.**